
ENGINEERING STANDARDS UPDATE

[Standards are serious business](#), but this newsletter isn't.

Topics this month:

- **Electrical Inspection Plan Preparer's Guide—NEW!**
- **Viewing Entrust-signed PDFs with Firefox**
- **Training & Qualification (ASME...)**
- **LANL Standards Issued in February**
- **Engineering Processes News**
- **DOE Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed**

The LANL Engineering Standards: <http://engstandards.lanl.gov/>

Rock Chalk, Jayhawk!
Just sayin'.

ELECTRICAL INSPECTION PLAN PREPARER'S GUIDE — NEW!

Electrical POC Eric Stromberg has created an electrical inspection guide that can be used when minor or major electrical work is being designed and inspections and/or tests are warranted, which is nearly always. The guide covers the typical electrical work performed at LANL and the required and recommended inspections. System engineers and others performing small modification design will find it very useful when developing Post Mod Test criteria (AP-341-801), and it's being used to improve the Test & Inspection Plan template with ESM Ch 16, Section IBC-IP.

It's posted as a reference to ESM Chapter 7, Electrical and Ch. 16, IBC Program.

On a related note, the primary entity for NEC inspections is the OSH-ISH [Electrical Inspection Team](#). More on that in a future issue.

VIEWING ENTRUST-SIGNED PDFS WITH FIREFOX

When viewing LANL pdf documents signed with Entrust authentication software, alert Firefox browser users may be puzzled by seemingly missing signatures. This can be corrected by changing a Firefox setting that forces pdfs to open in Acrobat rather than Firefox.

To change the setting, go the "Open menu" icon near the upper right ☰, choose Options, scroll down to the listing of applications, single-click the row for pdf, and then either click downish arrow or double-click right half to open choices. Choose Use Adobe Acrobat DC (default)—not the preview in Firefox that's likely chosen. Thanks to Christina Salazar-Barnes for the tip.

Semi-related note: Manipulating all documents in SharePoint is best done with Internet Explorer, not Firefox.

Remembering the Station Nightclub Fire

The fourth-deadliest nightclub fire in U.S. history, a blaze at The Station nightclub in West Warwick, R.I., on Feb. 20, 2003, claimed 100 lives. [Read more](#) (goes to Int'l Code Council)

On a lighter note:

ATTENDING MEETINGS

ARCHITEXTS



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TRAINING & QUALIFICATION

ASME Offsite Courses – Attn: Mechanical Engineers!!!

There are lots of non-LANL [ASME](#) courses in Santa Fe in March; you can filter by Location to bring up only Santa Fe classes...but many of the courses are offered at the same time. Pricy but no airfare required. Thanks to Kelly Bingham for the tip.

CGD Preparers Course 30727, March 9, 8:00 am – 5:00 pm, Canyon Complex Room 165
Required if you perform or approve commercial grade dedication packages for nuclear service per AP-341-703; you must have taken prerequisite Course 30726, CGD Overview, before taking Preparers. POCs: Sarwal/Frantz/Ruby Molinar

COE Safety Basis Overview for Engineers Course 39564, March 17, 1:00 – 3:00pm, Canyon Complex Room 165. POCs: Joy Getha/Ruby Molinar



Engineering Standards Update
 Topics this month: March 2020

For UTrain Courses: Registering: Go to [UTrain](#), search on course, select and enroll. Disenroll if you have to bail. AEs can also register; use token (CryptoCard) or contact ES T&Q coordinator Yolanda Trujillo at 665-5696 or yitrujillo@lanl.gov with Z number.

LANL STANDARDS ISSUED IN FEBRUARY
Engineering Standards Manual [ESM STD-342-100](#)

ESM-Chapter	Section	Title	Rev.								
Chapter 7 Electrical	Chapter References		-	NEW: Issued Electrical Inspection Plan Preparer's Guide; see article above.							
Chapter 9 -- Security		Facility Protection & Security	4	Issued VAR-10381, Vault Door and X-ray Machine Purchase Approvals, adding review requirements when purchasing/installing. Thanks to Jason Leeches, POC Jeff Mccale.							
Chapter 13 Welding, Joining, & NDE	Vol 3	Welding Procedure Specifications (WPS)	-	NEW: Issued WPS 1000-XXXX-1grp3 for pRad Blue vessel(s), see below. Thanks to Kelly Bingham, POC David Bingham.							
LANL BPS/WPS (.pdf)	Process	P/M/S Number				Base Material		Thickness Range		Issue	Rev.
Designation	_	P#	Group	P#	Group	1st	2nd	Min.	Max.	_	_
1000-XXXX-1grp3	SMAW	1	3	1	3			0.1250	8.0000	02/24/20	0

CAD Standards Manual [STD-342-300](#)

Section	Section/Title	Rev.	Date	Summary of Revision
100	General Requirements	-	2/3/2020	Issued VAR-10383, Elimination of CAD Standards for Sketches [in para. 4.0.A.6] Thanks to Jorge Ruiznavarro, Michael Richardson, and POC Scott Richardson.

Drawings & Details [STD-342-400](#)

Chapter 3 – Civil (LOW IMPACT DEVELOPMENT) – NEW!!!

Thanks to Sam Loftin, Terrill Lemke, Santana Rael, Estevan Atencio, POC John O'Brien.

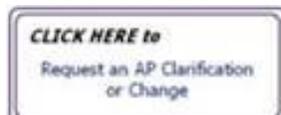
Dwg #	Sheet	Rev.	Title	Date
ST-G20GEN-1	1	0	General Design Requirements	2/10/2020
ST-G20GEN-1	2	0	Specific Design Requirements	2/10/2020
ST-G20GEN-1	3	0	Specifications Standards	2/10/2020
ST-G20GEN-1	4	0	Vegetated Swale	2/10/2020
ST-G20GEN-1	5	0	Storm Water Channel	2/10/2020
ST-G20GEN-1	6	0	One-Rock Check Dam	2/10/2020
ST-G20GEN-1	7	0	Check Dam + V-Weir	2/10/2020
ST-G20GEN-1	8	0	Zuni Bowl	2/10/2020
ST-G20GEN-1	9	0	Sloped Dissipater	2/10/2020
ST-G20GEN-1	10	0	Flowline Extender	2/10/2020
ST-G20GEN-1	11	0	Level Spreader	2/10/2020
ST-G20GEN-1	12	0	Filter Media	2/10/2020
ST-G20GEN-1	13	0	Permeable Paving	2/10/2020
ST-G20GEN-1	14	0	Bio-Retention Cell /Oxbow	2/10/2020
ST-G20GEN-1	15	0	Control Basin	2/10/2020
ST-G20GEN-1	16	0	Cistern	2/10/2020

ENGINEERING PROCESSES NEWS

The following Administrative Procedures have been revised and posted on the [SharePoint site](#):

AP-341-519-R6	Design Revision Control	Issued Feb 3, VAR-10382, "AP-341-519 Rev. 6 Effective Date Extension for Delta." The AP effective date is February 20, so extended the effective date of Rev. 6 for those projects that use the Delta system to process their change control forms/documents. The group working on upgrading Delta says that 30 days extension will be sufficient to complete the task. This will make the effective date for Delta users 3/23/20 (allowing for the weekend).
AP-341-612 R3	Facility Design Descriptions	Issued 2/19/2020, effective 3/20/2020.

The CoE Eng Processes Manager is Sarah Terrill, 667-7788, sterrill@lanl.gov. Please enter issues on APs in the SharePoint issues database. Use the live button below, same one that's found in the upper right of the Processes SharePoint [homepage](#).



DOE TECHNICAL STANDARDS ACTION

Tech Stds Program [postings](#) in the past month:

[DOE-STD-1217-2020, Safeguards and Security Survey and Self-Assessment Planning, Conduct, and Reporting](#)

This document provides the Department of Energy (DOE) with a standard methodology for adapting the Department's requirements to conduct and report Safeguards and Security (S&S) surveys and self-assessments to organization-specific needs in a coherent, consistent, and repeatable fashion. It describes a consistent and acceptable approach to planning, conducting, and reporting the results for S&S surveys and self-assessments. Appendix A, Safeguards and Security (S&S) Survey and Self-Assessment Toolkit, provides guidance and useful templates for planning, conducting, and reporting surveys and self-assessments.

NATIONAL STANDARDS ACTION

LANL's [IHS](#) online codes & standards subscription news: none.

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

Here's one that's probably more apropos of R&D engineering for a change.

ENGINEER'S DICTIONARY

MAJOR TECHNOLOGICAL BREAK-THROUGH

Back to the drawing board.

DEVELOPED AFTER YEARS OF INTENSIVE RESEARCH

It was discovered by accident.

PROJECT SLIGHTLY BEHIND ORIGINAL SCHEDULE DUE TO UNFORESEEN DIFFICULTIES

We are working on something else.

THE DESIGNS ARE WELL WITHIN ALLOWABLE LIMITS

We just made it, stretching a point or two.

CLOSE PROJECT COORDINATION

We should have asked someone else—or, let's spread the responsibility for this.

CUSTOMER SATISFACTION IS BELIEVED ASSURED

We were so far behind schedule that the customer was happy to get anything at all from us.

THE DESIGN WILL BE FINALIZED IN THE NEXT REPORTING PERIOD

We haven't started this job yet, but we've got to say something.

A NUMBER OF DIFFERENT APPROACHES ARE BEING TRIED

We don't know where we're going, but we're moving.



PRELIMINARY OPERATIONAL TESTS WERE INCONCLUSIVE
The darn thing blew up when we threw the switch.

EXTENSIVE SUPPORT IS BEING APPLIED ON A FRESH APPROACH TO THE PROBLEM
We just hired three guys—we'll let them kick it around for a while.

TEST RESULTS WERE EXTREMELY GRATIFYING
It works, and are we surprised!!

THE ENTIRE CONCEPT WILL HAVE TO BE ABANDONED
The only guy who understood the thing quit.

MODIFICATIONS ARE UNDERWAY TO CORRECT CERTAIN MINOR DIFFICULTIES
We threw the whole thing out and are starting from scratch.

LAST MONTH'S UPDATE TOPICS

Miss an issue? The archive is at "[Monthly Update](#)" on the [Standards homepage](#). Last month's topics:

- **Engineers Week**
- **Training & Qualification (ASME...)**
- **LANL Standards Issued in January or so**
- **Engineering Processes News**
- **DOE Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed**

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